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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,913	12/01/2003	Takayuki Kinoshita	JP920020209US1	3308
48583 7590 08/03/2007 BRACEWELL & GIULIANI LLP PO BOX 61389 HOUSTON, TX 77208-1389			EXAMINER DANG, HUNG Q	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 08/03/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/724,913

Applicant(s)

KINOSHITA ET AL.

Examiner

Hung Q. Dang

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-8 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/01/2003
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claim 17 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claim 17 recites "a program ...". However, it appears that such would reasonably be interpreted by one of ordinary skill in the art as software, per se. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Software does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

However, in contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035 (MPEP 2106.01.I).

Accordingly, the examiner suggests amending the claim to "a computer-readable medium encoded with a software program" or equivalent in order to make the claim

statutory. Any amendment to the claim would be commensurate with its corresponding disclosure.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 6-7, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. (US Patent 7,003,711) and Bohrer et al. (US 2003/0004948).**

Regarding claim 6, Noda et al. disclose a content reproducing apparatus for reading and reproducing a digital content (Fig. 6; column 4, lines 29-31; column 11, lines 42-50) recorded in a disk-shaped recording medium (Fig. 1; Fig. 4), comprising: head position estimating means for estimating the present position with respect to the recording medium, of ahead for reading the digital content (column 11, lines 52-54); data position calculating means for calculating a position of a data block for a digital content to be read next, and positions of other data blocks existing near the data block (column 11, lines 52-54; column 12, lines 22-37); and moving destination determining means for determining a data block at which the time required to move the head is the shortest, as a data block to be read next, based on the present position of the head, which has been estimated by the head position estimating means, and the positions of

the respective data blocks, which have been calculated by the data position calculating means (column 11, lines 52-58).

However, Noda et al. do not disclose data position calculating means for calculating a position of a data block for a digital content to be read next, and positions of other data blocks existing before and after the data block.

Bohrer et al. disclose data position calculating means for calculating a position of a data block for a digital content to be read next, and positions of other data blocks existing before and after the data block (Fig.3; [0035]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the data position calculating means disclosed by Bohrer et al. into the apparatus disclosed by Noda et al. because, according to Noda et al., the incorporated feature would help in minimizing disk head movement and heat dissipation and conserve energy ([0035]).

Regarding claim 7, Noda et al. also disclose the moving destination determining means determines, based on a rotation latency necessary for the head to move on a track having predetermined data existing thereon and then for the recording medium to rotate to thereby cause the data to reach the position of the head, a time required to move the head to the position of the corresponding data block (column 9, lines 40-45; column 11, lines 55-58).

Regarding claim 15, Noda et al. disclose a method of controlling a content reproducing apparatus for reading and reproducing a digital content (Fig. 6; column 4, lines 29-31; column 11, lines 42-50) recorded in a disk-shaped recoding medium (Fig. 1;

Fig. 4), comprising: estimating the present position with respect to the recording medium, of a head for reading the digital content (column 11, lines 52-54); calculating a position of a data block for the digital content to be read next, and positions of other data blocks existing near the data block (column 11, lines 52-54; column 12, lines 22-37); calculating a time required to move the head, based on the estimated present position of head and the positions of the respective data blocks (column 11, lines 52-58; column 9, lines 40-45).

However, Noda et al. do not disclose calculating a position of a data block for the digital content to be read next, and positions of other data blocks existing before and after the data block and reading a data block at which the calculated time required to move the head is the shortest.

Bohrer et al. disclose calculating a position of a data block for the digital content to be read next, and positions of other data blocks existing before and after the data block ([0035]) and reading a data block at which the calculated time required to move the head is the shortest ([0034]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the steps of calculating the positions of data and reading a data block at which the calculated time required to move the head is the shortest disclosed by Bohrer et al. into the method disclosed by Noda et al. because, according to Noda et al., the incorporated feature would help in minimizing disk head movement and heat dissipation and conserve energy ([0035]).

Claim 17 is rejected for the same reason as discussed in claim 15 above.

**Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noda et al. (US Patent 7,003,711) and Bohrer et al. (US 2003/0004948) as applied to claims 6-7, 15, and 17 above, and further in view of Dobbek et al. (US Patent 6,219,198).**

Regarding claim 8, see the teachings of Noda et al. and Bohrer et al. as discussed in claim 6 above. However, the proposed combination of Noda et al. and Bohrer et al. does not disclose the head position estimating means measures a time taken to execute a command for reading the data block and reflects the result of measurement on estimation of the positions of the magnetic head.

Dobbek et al. disclose a head position estimating means measures a time taken to execute a command for reading the data block and reflects the result of measurement on estimation of the positions of the magnetic head (column 11, lines 34-43).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the head position estimating means disclosed by Dobbek et al. into the apparatus disclosed by Noda et al. and Bohrer et al. because, according to Dobbek et al., it would improve accuracy (column 3, lines 5-8).

Claim 16 is rejected for the same reason as discussed in claim 8 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is 571-270-1116. The examiner can normally be reached on M-Th:7:30-6:00.

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Dang  
Patent Examiner

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